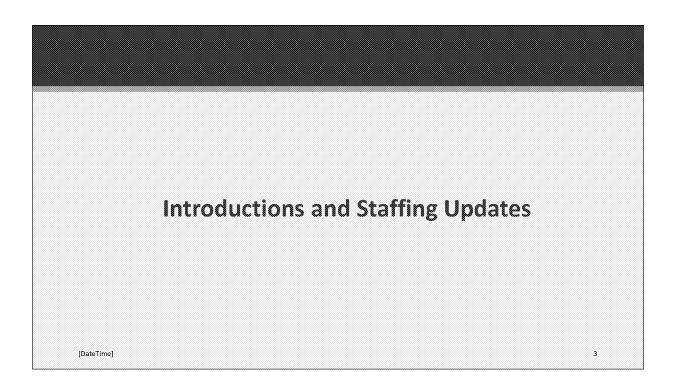
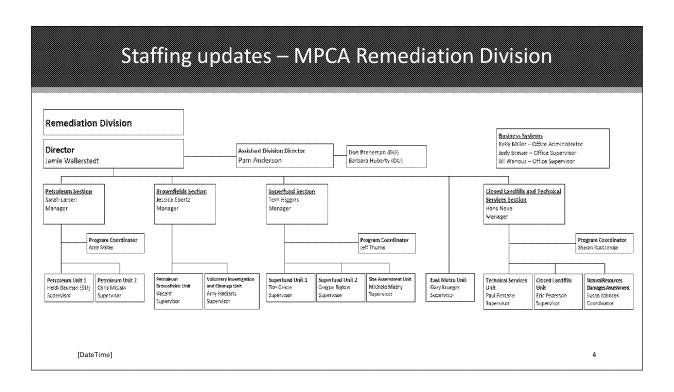


Agenda

- Introductions
- Staffing updates
- 1995 Enforcement Deferral Pilot Project
- MPCA PFAS Coordination
- Infrastructure bill and MN sites
- Site specific discussions





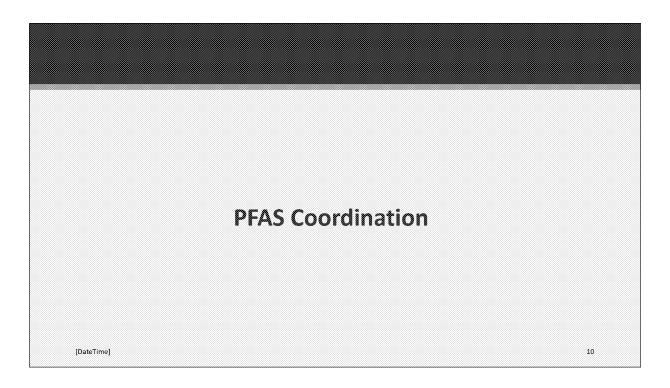
Staffing updates – MPCA Superfund *Student worker – Vecent DU – Duluh Office Remediation Division Program Coordinator Jeff Thuma Superfund Section Tom Higgins, Manager Superfund Unit 1 Tim Grape Superfund Unit 2 Site Assessment Unit Crague Biglow Michele Mabry Supervisor Supervisor Supervisor Staff: Staff: Brian Davis Lindsay Egge Jennifer Jevnisek Thomas Reppe Ashley Sapon Staff: Daniel Cervin (DU) Mark Elliot (DU) Pamela Foster (DU) Michael Ginsbach Starr: Drew Bahi Sondra Campbell Christopher Goscinak Kathryn Grant Doree Husnik Jennifer Haas Madison Scheer Yodit Sheido Brigitte Hay LaRae Lehto (DU) Lauren Larkin Kevin Sikkila (DU) Brad Leick (DU) Steve Schoff Hydro 2 Vacancy Zachary Skelly Gregory Small Felicia Williamson Matthias Wolf [DateTime]

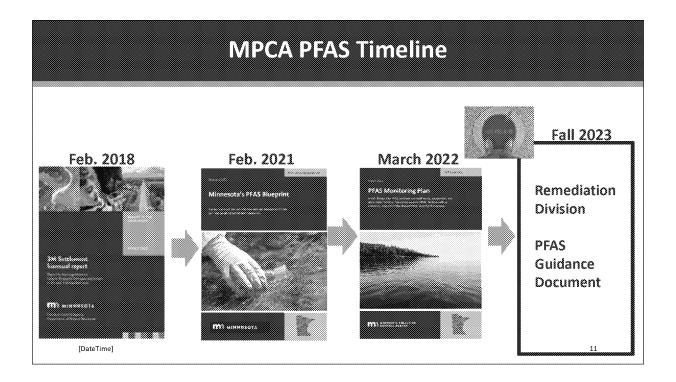
1995 EPA-MPCA Pilot Deferral [DateTime] Optional Tagline Goos Here | mn.gov/websiteurl 6

	1995 Enforceme	ent Deferral Pi	lot Project	
Red	dacted as Non	Responsiv	e (Other Sit	es)

1995 Enforcement Deferral Pilot Project (Bold = active, italics = proposed removal from pilot) Site Name Regulatory Lead (EPA or MPCA) Site Status Redacted as Non Responsive (Other Sites)

1995 Enforcement Deferral Pilot Project Redacted as Non Responsive (Other Sites) (DateTime)





Last year the Blueprint was launched – it's the agency's action plan for PFAS and answers the what and the why - what is PFAS and why do we need to monitor/sample/identify PFAS throughout the state is centered around 3 strategies: prevent, manage and clean-up. The remediation sector is responsible for the third strategy.

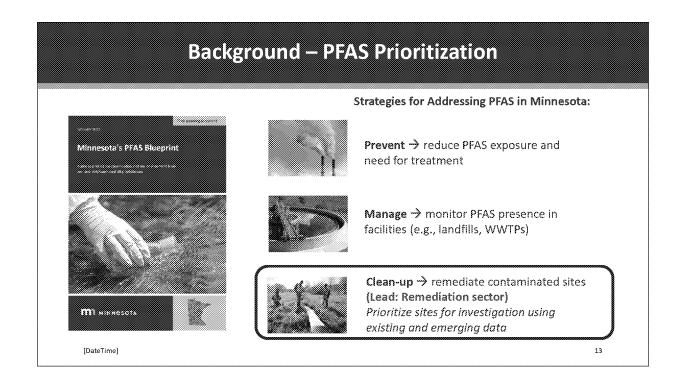
That brings us to the monitoring plan – this is also an agency wide document which answers the where and when. Where will we sample for PFAS and when will sampling be necessary. The draft monitoring plan was launched in November of last year. The public comment period was open until last month and we're currently updating the monitoring plan based on the inputs we received.

The final question is the how à this will be answered by the guidance document. Moreover, it will be a "how" that's specific to the Remediation program.

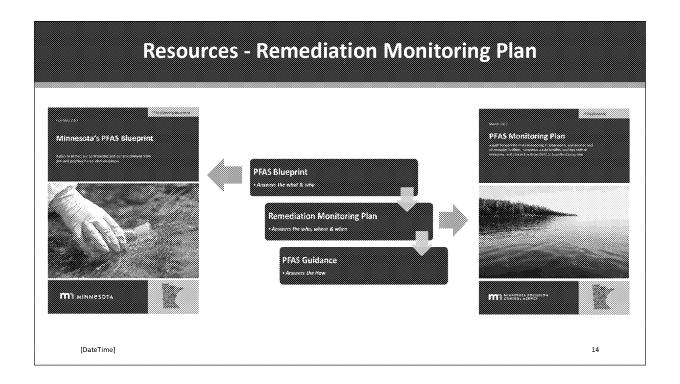
MPCA PFAS Updates

- PFAS Blueprint February 2021
 - Strategic coordinated approach to protect MN communities from PFAS
 - Immediate, short- and long-term strategies that state agencies, the Minnesota Legislature, industries, and local governments should consider to prevent, manage, and clean up PFAS contamination
 - MERLA contains statutory framework to begin acting on PFAS
- PFAS Monitoring Plan March 2022
 - Appendix E Remediation Division
 - Superfund incorporated PFAS into active sites / scopes beginning in state FY23
- PFAS Guidance Development Fall 2023
- Stakeholder Advisory Group

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The PFAS Blueprint was launched in early 2021 and represents an opportunity for Minnesota to take stock of the current PFAS-related activities as well as identify both gaps and opportunities. There are 10 issue papers centered around three main strategies – the prevention, management and remediation of PFAS in the environment. The Remediation Division is listed as the lead agency for the third strategy and it expected that the vetted protocol will be used to assist in identifying investigating and remediating potential PFAS sources throughout the state.



We'd like data to help us identify where we should collect data! The expectation is that we'll be able to use some of the available data to support us as we fine tune the monitoring requirements. I think you're all familiar with the PFAS blueprint – it's the agency's action plan for PFAS – I'd say that it answers the what and why – what is PFAS and why do we need to monitor/sample/identify PFAS throughout the state. PFAS Blueprint (an action plan for the state) and the Monitoring Plan (a guide for decision-making). The blueprint is an opportunity for Minnesota to take stock of the current PFAS-related activities as well as identify both gaps and opportunities. The PFAS Blueprint is centered around three main strategies – the prevention, management and remediation of PFAS in the environment. The Remediation Division is listed as the lead agency for the third strategy and it expected that the vetted protocol will be used to assist in identifying investigating and remediating potential PFAS sources throughout the state.

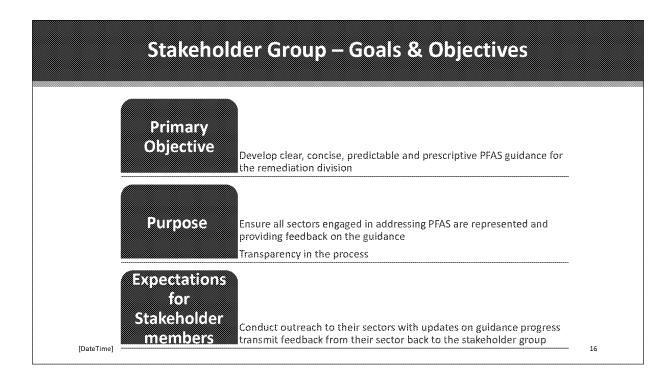
Just a reminder that the blueprint is centered around 3 strategies: prevent, manage and clean-up. The remediation sector is responsible for the third strategy. That brings us to the monitoring plan – this is also an agency wide document which answers the where and when.

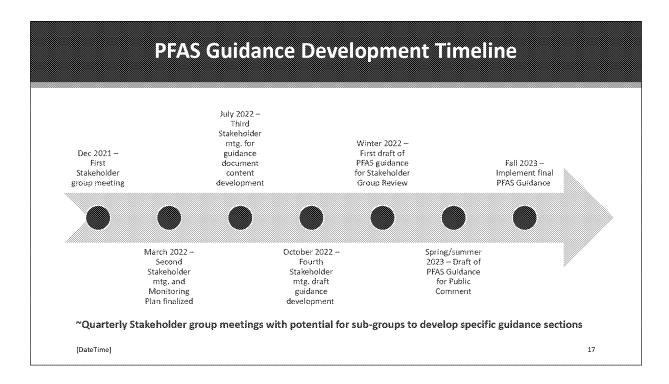
PFAS Stakeholder Advisory Group

PFAS Stakeholder group is made up of the following sector representatives:

- Environmental consultants (MPCA, industry/RPs, Brownfields)
- Legal
- Brownfields
- Municipal (counties, cities)
- Academia
- Analytical laboratory
- · Banks/Lenders
- MPCA and MDH program staff

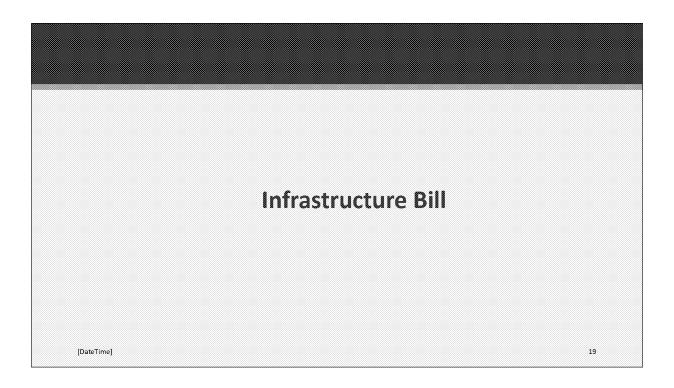






EPA PFAS Updates

- Timeline updates for hazardous substances designation rule under CERLCA?
 102a designation versus amending hazardous substance 'lists' under 101(14)?
- Timeline updates on draft MCL's / MCLG's?
- What is EPA Superfund's plan for using draft MCLs? Continued use of the regional screening values in the absence of state promulgated values?
- Will EPA consider re-opening of RODs to facilitate PFAS investigative needs? If so, how will these evaluations be structured? Will EPA be making determinations or or can the State provide input?
- Will EPA Removals be available to respond at NPL sites in MN exceeding drinking water standards (either draft MCLs when released or in excess of state promulgated standards)?
- How will revenues from the Superfund Tax be directed to the regions/states for use? How will the tax revenue's impact EPA's general appropriations from Congress?



Infrastructure bill and MN sites * Redacted as Non Responsive (Other Sites) * [DateTime]



MN NPL site specific discussions * South Andover (1,4 DX & PFAS - Red Oaks Neighborhood Drinking Water Impacts) * Redacted as Non Responsive (Other Sites) * The state of the specific discussions are specific discussions.



October 26, 2022

The Red Oaks neighborhood in Andover, MN outlined in blue with WDE landfill outlined in yellow. Investigation 7/1/2021 1,4-dioxane result of 1.1 ppb at single home Investigation expands to W and S 1,4-dioxane detected in SE of neighborhood,

Communications

- 2 public meetings
- 2 office hours sessions
- Many newsletter articles
- Website updates
- Too many citizen calls to count

PFAS detected at most homes

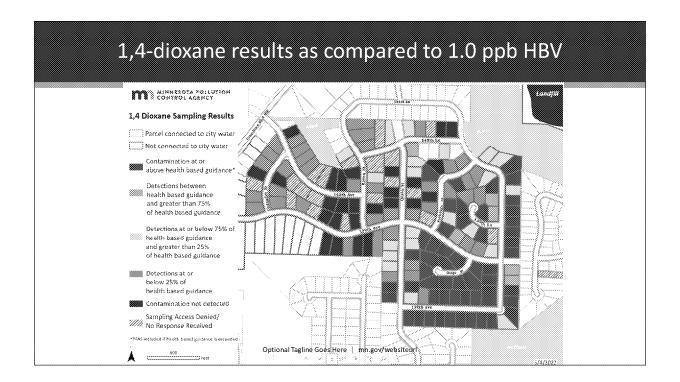
Citizen Concerns

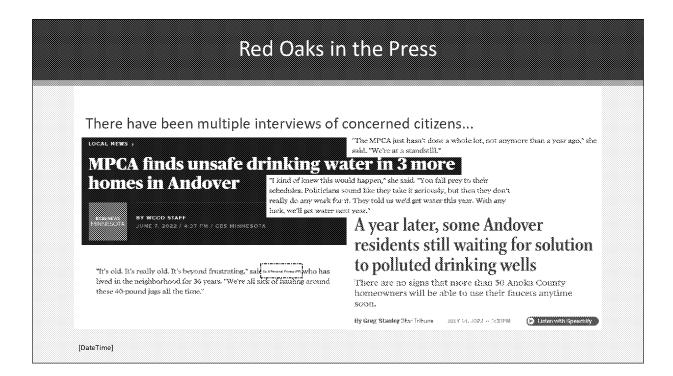
- Health of residents and their families
- Property value decrease
- Costs of municipal water
- Losing private wells
- Bottled water Sampling

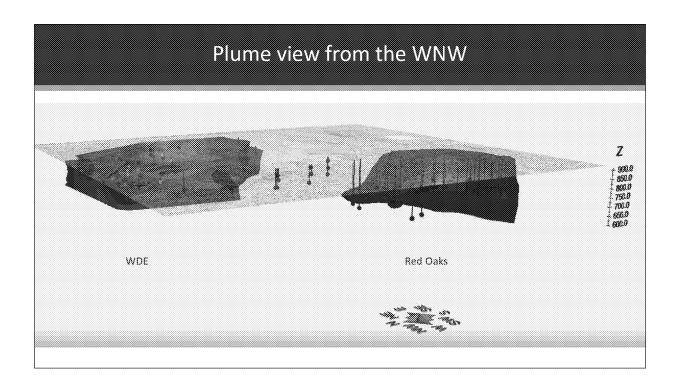
The South Andover Superfund

Site to the South of Bunker Lake Boulevard.





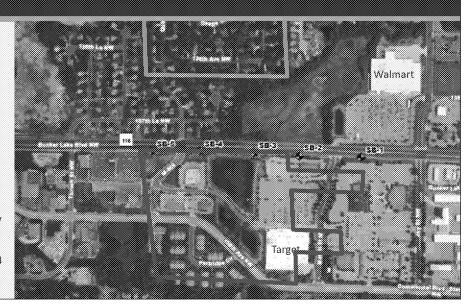




Show the lack of a link between the two 1-4 dioxane plumes

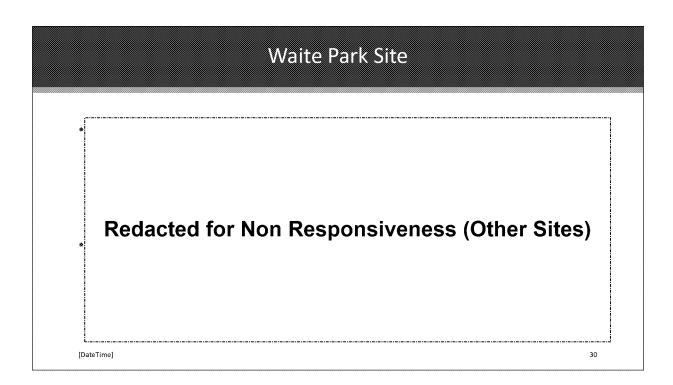
Bunker Lake Blvd Sample Points

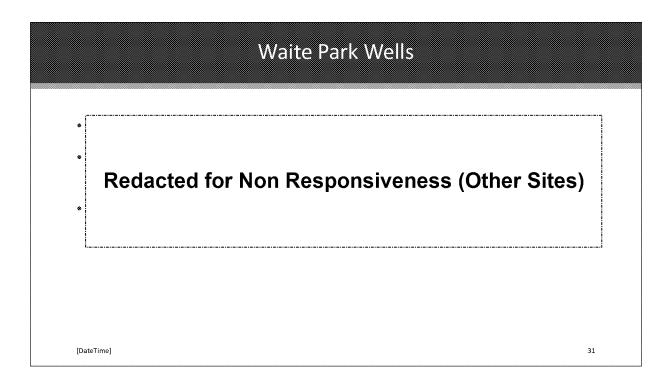
- Groundwater flow direction is North according to some historical documents
- SB-2 1,4-dioxane result 840ppb in deep sample
- Low amounts 1,4 dioxane shallow and medium samples at SB-2 and deep sample at SB-3
- PFOS and PFOA exceed drinking water criteria at SB1, 2, 3, and 4 at shallow and mid-depths
- South Andover NPL Site never tested for either 1,4 dioxane or PFAS



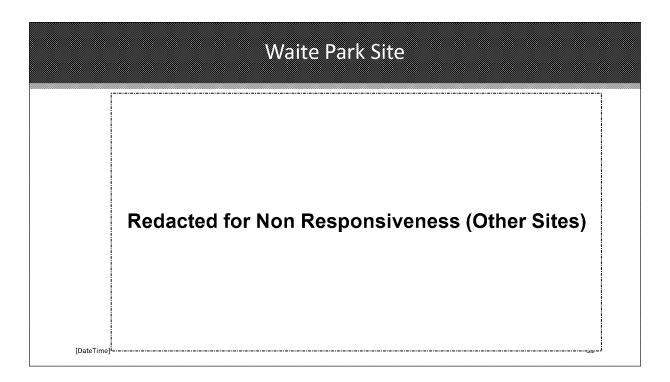
Red Oaks Needs...

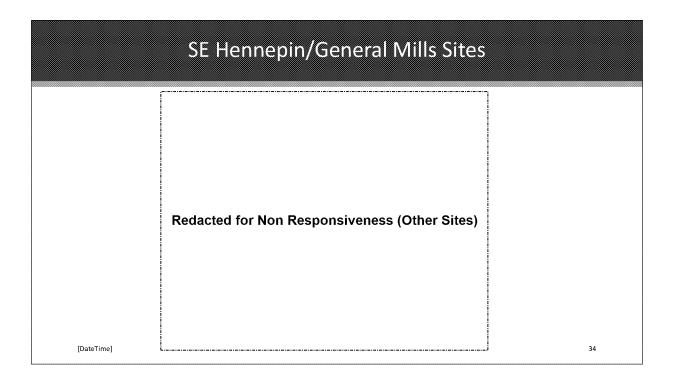
- Source Investigation
- Municipal Water
 - \$12.1 Million Needed
- Future Sampling
 - PFAS expansion to the Western edge of Red Oaks and continuing West
 - 1,4-dioxane and PFAS in South Andover SF Site

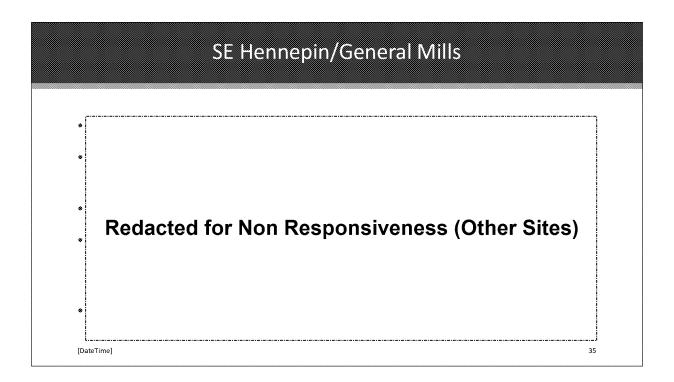




Waite Park Wells	
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	SE Hennepin/General Mills	
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Josyln Site
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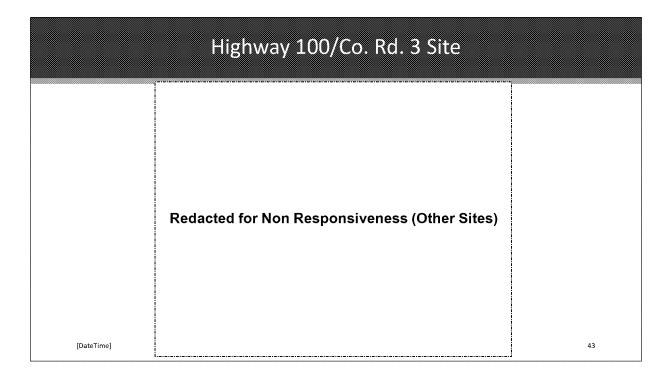


	FMC/NIROP Sites	
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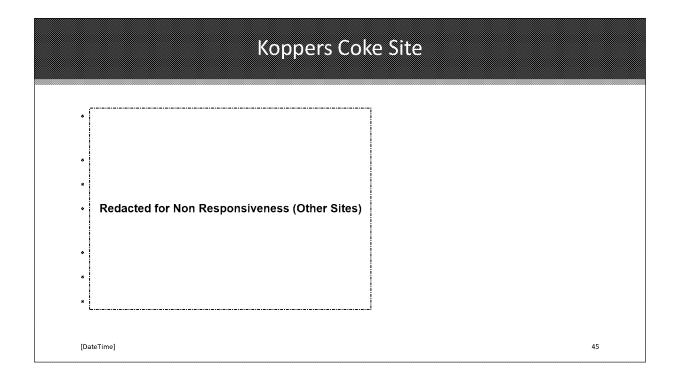
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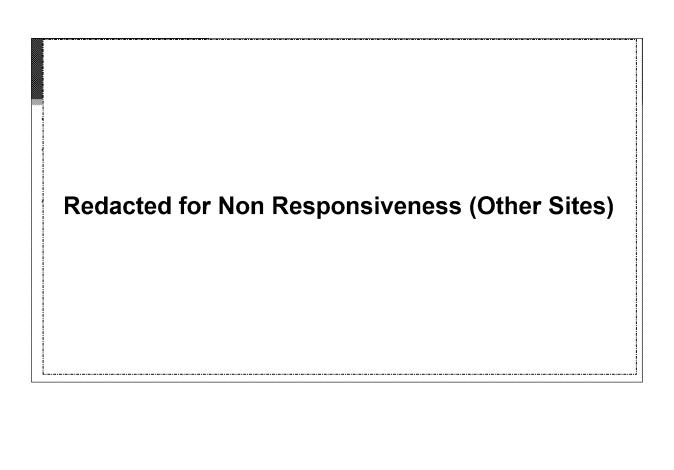
Arrowhead Refinery Site
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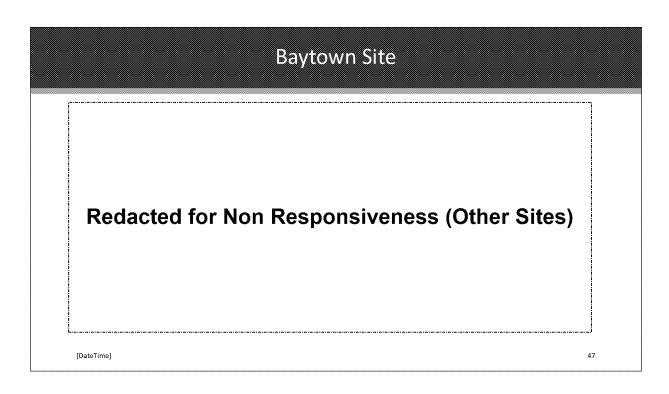
	Arrowhead Refinery Site	
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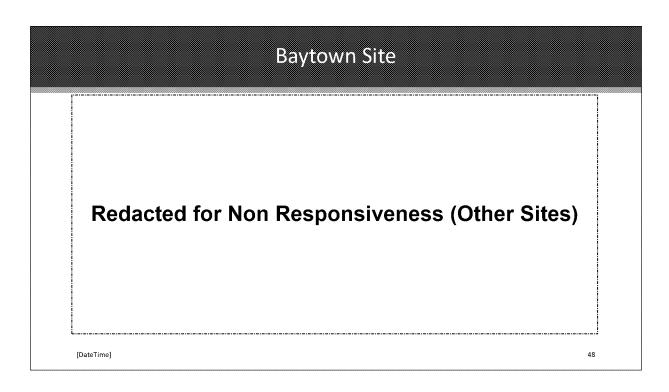


Highway 100/Co. Rd. 3 Site	
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[DateTime]	44









MPCA Superfund Leadership Team

- Jamie Wallerstedt | Remediation Division Director
- Tom Higgins | Superfund Section Manager
- Crague Biglow | Superfund Supervisor / SLRAOC
- Tim Grape | Superfund Supervisor
- Michele Mabry | Site Assessment Supervisor
- Jeff Thuma | Program Administrator & Contract Manager

[DateTime]

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